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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/802,027

03/17/2004

Yukio Shoji

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EXAMINER

DRODGE, JOSEPH W

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

02/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/802,027	Applicant(s) SHOJI ET AL.	
	Examiner Joseph W. Drodge	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action, amendments and clarifications to the rejections made in this Final office action are in bold-face and are underlined:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Stutzman patent 5,271,850.

Stutzman discloses [for claims 1 and 8] inflow chamber (space bounded by flow baffle 16, housing sidewall 18 and top cover 12 of the filtration unit 10 including annular space 29 outside of peripheral jacket 27) communicating with inlet 7 from which fluid flows, outflow chamber 25 communicating with outlet 15, cylindrical filter element 20 that is comprised of layers of fibrous media (column 3, lines 52-63), the outside most-layer proximate jacket 27 comprising it's outer peripheral surface and inner-most layer proximate cartridge bore outer surface comprising inner peripheral surface , and a flow-directing structure 26 made of layers of wide-mesh horizontal screen extending radially outwardly from central end caps 24 and 28 (column 3, lines 59-62, column 5, lines 2-5 and column 6, lines 5-8). A portion of the flow through the inflow chamber is upwards through the outer and central layers of the filter element in a rising flow and is then redirected radially inwards towards the inner peripheral surface of the filter element. The flow-directing structure 26 can also be considered a guide for claim 8.

Regarding claim 2, the upper portion of the inflow chamber can also be considered an inlet to a downwardly directed flow through the outer layers of the filter.

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For claim 3, the flow-path formed by layers of screen of mesh 26 are also of a narrowed cross-section.

For claims 4 and 5, flow between baffle 16 and lower extent of the filter layers has a rising flow.

For claim 6, the inflow chamber has a generally stream-lined shape, especially portion comprising annular chamber 29.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Campo patent 3,675,776.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7,9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stutzman in view of Budzich. These claims differ in requiring a differential pressure sensor to detect pressure differences between inflow chamber and outflow chamber. However, Budzich teaches a differential pressure sensor, whose details are extensively discussed at (Abstract, column 2, lines 35-41). It would have been obvious to have incorporated a differential pressure sensor of Budzich into the Stutzman oil filtering device, to ensure timely opening of the drain outlet in the bottom of the filter housing, to avoid entrainment of separated water and particles into the flow of oil fluid through the filter.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campo patent 3,675,776 in view of Kuh et al patent 4,681,677. Campo discloses inflow chamber 22/A, outflow chamber 24/B, filter element 28 comprising a plurality of integral, immediately adjacent layers that each comprise target trapping/adsorbing elements that act as fall-off preventing elements that are of dis-similar materials and hence of varied mesh sizes (see column 3, lines 35-60).

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Applicant's arguments with respect to claims 1-9 and 12, filed on December 19, 2007 have been fully considered but they are not persuasive. It is argued that flow within the filter of Stutzman is mainly axially. However, the claims are broad enough to read on flow patterns within a filter that are substantially or mainly axial and include only a section having radially directed flow.

Applicants consider that the filter tissue of Stutzman does not have an outer or inner surface since it is only wrapped tissue. However, it is submitted that Stutzman discloses "layers" of such filter media tissue; the outermost layer being an outer surface and innermost layer being an inner surface.

Argument pertaining to baffle structure 16 of Stutzman do not remain germane, since other portions of the Stutzman structure are now relied upon for the claim elements.

Applicant's arguments with respect to claims 10 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Roy Sample, can be reached at 571-272-1376. The fax phone number for the examining group where this application is assigned is

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571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

February 12, 2007

/Joseph W. Drodge/
Primary Examiner, Art Unit 1797